Restriction/Election

Restriction to one of the following inventions has been required under 35 USC 121:

I. Claims 1-2, in so far as they are drawn a biopolymer marker of SEQ ID NO: 1, classified in class 530, subclass 300, for example.

II. Claims 1-2, in so far as they are drawn a biopolymer marker of SEQ ID NO: 2, classified in class 530, subclass 300, for example.

III. Claims 1-2, in so far as they are drawn a biopolymer marker of SEQ ID NO: 3, classified in class 530, subclass 300, for example.

IV. Claims 3-9, in so far as they are drawn to a method for evidencing a disease by evidencing a biopolymer marker of SEQ ID NO: 1, classified in class 424, subclass 86, for example.

V. Claims 3-9, in so far as they are drawn to a method for evidencing a disease by evidencing a biopolymer marker of SEQ ID NO: 2, classified in class 424, subclass 86, for example.

VI. Claims 3-9, in so far as they are drawn to a method for evidencing a disease by evidencing a biopolymer maker of SEQ ID NO: 3, classified in class 424, subclass 86, for example.

VII. Claims 10-28, in so far as it is drawn to a diagnostic kit for determining the presence of the biopolymer of SEQ ID NO: 1, classified in class 424, subclass 130.1, for example.

VIII. Claims 10-28, in so far as it is drawn to a diagnostic kit for determining the presence of the biomarker of SEQ ID NO: 2, classified in class 424, subclass 130.1, for example.

IX. Claims 10-28, in so far as it is drawn to a diagnostic kit for determining the presence of the biomarker of SEQ ID NO: 3, classified in class 424, subclass 130.1, for example.

X. Claims 29-32, in so far as they are drawn to an antibody that binds a biopolymer marker of SEQ ID NO: 1, classified in class 530, subclass 397.1, for example.

XI. Claims 29-32, in so far as they are drawn to an antibody that binds a biopolymer marker of SEQ ID NO: 2, classified in class 530, subclass 397.1, for example.

XII. Claims 29-32, in so far as they are drawn to an antibody that binds a biopolymer marker of SEQ ID NO: 3, classified in class 530, subclass 397.1, for example.

XIII. Claims 33-37, in so far as they are drawn to a process for identifying therapeutic avenues by using a biopolymer maker of SEQ ID NO: 1, classified in class 435, subclass 7.1, for example.

XIV. Claims 33-37, in so far as they are drawn to a process for identifying therapeutic avenues by using a biopolymer maker of SEQ ID ON: 2, classified in class 435, subclass 7.1, for example.

XV. Claims 33-37, in so far as they are drawn to a process for identifying therapeutic avenues by using a biopolymer marker of SEQ ID NO: 3, classified in class 435, subclass 7.1, for example.

XVI. Claim 38, in os far as it is drawn to a process for regulating a disease state by controlling the presence or absence of a biopolymer marker of SEQ ID NO: 1, classified in class undetermined, subclass undetermined, for example.

XVII. Claim 38, in so far as it is drawn to a process for regulating a disease state by controlling the presence or absence of a biopolymer marker of SEQ ID NO: 2, classified in class undetermined, subclass undetermined, for example.

XVIII. Clam 38, in so far as it is drawn to a process for regulating a disease state by controlling the presence or absence of a biopolymer marker of SEQ ID NO: 3, classified in class undetermined, subclass undetermined, for example.

The three biopolymer marker peptides claimed in the instant application are as follows; amino acid residues 2-18 of SEQ ID NO:1; amino acid residues 2-18 of SEQ ID NO:2 and amino acid residues 2-13 of SEQ ID NO:3.

Applicants here elect with traverse Group I (claims 1 and 2, as drawn to the biopolymer marker peptide consisting of amino acid residues 2-18 of SEQ ID NO:1) for prosecution on the merits.

It is noted that the Examiner has also required an election of species under 35 U.S.C. 121 for Groups IV-XII, however since Applicants elect Group I (claims 1 and 2,as drawn to the biopolymer marker peptide consisting of amino acid residues 2-18 of SEQ ID NO:1), the election of species requirement is considered to be non-applicable.

Claims 1, 18, 29, 30, 33, 34 and 38 stand objected to as each allegedly recites an improper Markush grouping. The Examiner states (at page 2 of the Office Action mailed on February 5, 2003)that claims 1, 18, 29, 30, 33, 34 and 38 are each improper Markush claims because the plurality of amino acid sequences recited in these claims lack a common utility which is based upon a shared structural feature lacking from the prior art.

The amino acid sequences identified as SEQ ID NO:1 and SEQ ID NO:3 are each fragments of the same apolipoprotein J

precursor protein. Since each of the two claimed amino acid fragments are parts of the apolipoprotein J precursor, the sequence structure of the larger "parent" apolipoprotein J precursor protein is considered to be a shared structural feature between SEQ ID NO:1 and SEQ ID NO:3. Furthermore, since nucleotide sequences encoding the same protein are not considered by the Office to be independent and distinct inventions and are examined together (see MPEP 803.04), it follows that amino acid sequences encoding the same protein should be examined together.

Although SEQ ID NO:2 is a fragment from a different protein than that of SEQ ID NOS:1 and 3(SEQ ID NO:2 is a fragment of sulfated glycoprotein-2), SEQ ID NOS:1 and 2 show nearly identical sequences (with the exception of residues 4-6). The identical sequence represents a shared structural feature between SEQ ID NOS:1 and 2.

Additionally, the Examiner's attention is drawn to the fact that the instant application claims three short amino acid sequences, seven sequences less than the ten sequences normally considered by the Office as reasonable for examination purposes.

SEQ ID NOS: 1-3 are identified by the instant inventors as protein fragments which are predictive of Alzheimers Disease. Thus, SEQ ID NOS:1-3 share a common utility as markers predictive of disease.

Applicants have now demonstrated that unity of invention exists between the amino acid sequences of the Markush groupings recited in claims 1, 18, 29, 30, 33, 34 and 38 by showing a shared common utility (markers predictive of disease state) and by showing shared structural features (SEQ ID NOS:1 and 2 share nearly identical sequences, SEQ ID NOS:1 and 3 are part of the same "parent" apolipoprotein J precursor protein).

If the fragments of SEQ ID NOS:1-3 are found to be novel, methods and kits limited to their use should also be novel.

This application is related in claim format to several pending applications of which serial number 09/846,352 is exemplary. The biopolymer marker of serial number 09/846,352 was found to be novel and subsequently claims reading on methods and kits limited to its use were rejoined with the claims reading on the biopolymer marker under *Ochai*. In an effort to maintain equivalent scope in all of these applications, Applicants respectfully request that the Examiner reconsider the restriction requirement in the instant application to include the new claims (39-46) added herein by amendment.